



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/669,162 B  
Source: FFW16  
Date Processed by STIC: 7/28/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
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<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

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1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
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Room 1B03, Arlington, VA 22202



IFW16

## RAW SEQUENCE LISTING

DATE: 07/28/2004

PATENT APPLICATION: US/10/669,162B

TIME: 15:47:40

Input Set : A:\228234\_5.doc

Output Set: N:\CRF4\07282004\J669162B.raw

3 <110> APPLICANT: Breaker, Ronald R.  
 4 Nahvi, Ali  
 5 Sudarsan, Narasimhan  
 6 Ebert, Margaret S.  
 7 Winkler, Wade  
 8 Barrick, Jeffrey E.  
 9 Wickiser, John K.  
 11 <120> TITLE OF INVENTION: RIBOSWITCHES, METHODS FOR THEIR USE, AND  
 12 COMPOSITIONS FOR USE WITH RIBOSWITCHES  
 14 <130> FILE REFERENCE: 25006.0016U2  
 16 <140> CURRENT APPLICATION NUMBER: 10/669,162B  
 17 <141> CURRENT FILING DATE: 2003-09-22  
 19 <150> PRIOR APPLICATION NUMBER: 60/412,468  
 20 <151> PRIOR FILING DATE: 2002-09-20  
 E--> 22 <160> NUMBER OF SEQ ID NOS: 377 *Found 410*  
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0

Does Not Comply  
 Corrected Diskette Needed  
*(Pg. 1-7)*

## ERRORED SEQUENCES

154 <210> SEQ ID NO: 8  
 155 <211> LENGTH: 36  
 156 <212> TYPE: RNA  
 157 <213> ORGANISM: Artificial Sequence  
 159 <220> FEATURE:  
 160 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =  
 161 synthetic construct  
 163 <220> FEATURE:  
 164 <221> NAME/KEY: misc\_feature  
 165 <222> LOCATION: 11, 17, 20, 25, 36  
 166 <223> OTHER INFORMATION: n = g, a, c or u  
 168 <220> FEATURE:  
 169 <221> NAME/KEY: misc\_feature  
 170 <222> LOCATION: 6, 35  
 171 <223> OTHER INFORMATION: r = a or g  
 173 <220> FEATURE:  
 174 <221> NAME/KEY: misc\_feature  
 175 <222> LOCATION: 1-3, 15, 31  
 176 <223> OTHER INFORMATION: y = c or u  
 178 <400> SEQUENCE: 8  
 E--> 179 *yyyucrgggc nggggygnaa ucccnaccgg yggurn*  
 181 <210> SEQ ID NO: 9  
 182 <211> LENGTH: 51

*please insert → 36*  
*numbering*

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183 <212> TYPE: RNA  
 184 <213> ORGANISM: Artificial Sequence  
 186 <220> FEATURE:  
 187 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =  
 188 synthetic construct  
 190 <220> FEATURE:  
 191 <221> NAME/KEY: misc\_feature  
 192 <222> LOCATION: 1, 7-9, 13, 14, 16, 18, 25, 26, 32, 33, 37, 39, 42, 43, 50,  
 193 51  
 194 <223> OTHER INFORMATION: n = g, a, c or u  
 196 <220> FEATURE:  
 197 <221> NAME/KEY: misc\_feature  
 198 <222> LOCATION: 38, 44  
 199 <223> OTHER INFORMATION: r = a or g  
 201 <220> FEATURE:  
 202 <221> NAME/KEY: misc\_feature  
 203 <222> LOCATION: 17, 34  
 204 <223> OTHER INFORMATION: y = c or u  
 206 <400> SEQUENCE: 9

E--> 207 ncuuaunnng agnngnynga gggannggcc cnnyganrnc cnngcaacn n SAME error → 51

365 <210> SEQ ID NO: 18  
 366 <211> LENGTH: 22  
 367 <212> TYPE: RNA  
 368 <213> ORGANISM: Arabidopsis thaliana  
 370 <220> FEATURE:  
 371 <221> NAME/KEY: misc\_feature  
 372 <222> LOCATION: 9  
 373 <223> OTHER INFORMATION: d = g, a or u  
 375 <220> FEATURE:  
 376 <221> NAME/KEY: misc\_feature  
 377 <222> LOCATION: 1-7, 10-16  
 378 <223> OTHER INFORMATION: n = g, a, c or u  
 380 <400> SEQUENCE: 18

E--> 381 nnnnnnngdn nnnnnncuga ga SAME error → 22

1043 <210> SEQ ID NO: 60  
 1044 <211> LENGTH: 23  
 1045 <212> TYPE: RNA  
 1046 <213> ORGANISM: Bacillus subtilis  
 1048 <220> FEATURE:  
 1049 <221> NAME/KEY: misc\_feature  
 1050 <222> LOCATION: 12-131  
 1051 <223> OTHER INFORMATION: n = g, a, c or u  
 1053 <220> FEATURE:  
 1054 <221> NAME/KEY: misc\_feature  
 1055 <222> LOCATION: 2, 11, 52, 53, 70, 92, 132  
 1056 <223> OTHER INFORMATION: r = a or g  
 1058 <220> FEATURE:  
 1059 <221> NAME/KEY: misc\_feature  
 1060 <222> LOCATION: 3, 135

✓ Insert  
=

✓ Insert  
=

## RAW SEQUENCE LISTING

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TIME: 15:47:40

Input Set : A:\228234\_5.doc

Output Set: N:\CRF4\07282004\J669162B.raw

1061 <223> OTHER INFORMATION: w = a or u  
 1063 <220> FEATURE:  
 1064 <221> NAME/KEY: misc\_feature  
 1065 <222> LOCATION: 64, 72, 93, 119, 136  
 1066 <223> OTHER INFORMATION: y = c or u  
 1068 <400> SEQUENCE: 60

E--> 1069 rwagagggc rnnnnnnnann agua *Same error → 23*  
 1636 <210> SEQ ID NO: 98  
 1637 <211> LENGTH: 51  
 1638 <212> TYPE: RNA  
 1639 <213> ORGANISM: Bacillus subtilis  
 1641 <221> NAME/KEY: misc\_feature  
 1642 <222> LOCATION: 8, 13, 14, 26, 32, 33, 37, 41, 42, 50, 51, 54, 55, 63, 67  
 1643 <223> OTHER INFORMATION: n = g, a, c or u  
 1645 <220> FEATURE:  
 1646 <221> NAME/KEY: misc\_feature  
 1647 <222> LOCATION: 18, 38, 44, 53, 68, 71, 72, 78, 79, 84, 87  
 1648 <223> OTHER INFORMATION: r = a or g  
 1650 <220> FEATURE:  
 1651 <221> NAME/KEY: misc\_feature  
 1652 <222> LOCATION: 1, 17, 25, 34, 60, 74, 75  
 1653 <223> OTHER INFORMATION: y = c or u

W--> 1655 <400> 98

E--> 1656 ycuuaucnag agnnggyrga gggaynggcc cnnyganrcc nncrgcaacn n *Same error → 51*  
 7181 <210> SEQ ID NO: 379  
 7182 <211> LENGTH: 30 *Found 31*  
 7183 <212> TYPE: RNA  
 7184 <213> ORGANISM: Artificial Sequence  
 7186 <220> FEATURE:  
 7187 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =  
 7188 synthetic construct  
 7190 <220> FEATURE:  
 7191 <221> NAME/KEY: misc\_feature  
 7192 <222> LOCATION: 3-4, 7-9, 12, 14-15, 21, 24, 28-30  
 7193 <223> OTHER INFORMATION: n = g, a, c or u  
 7195 <220> FEATURE:  
 7196 <221> NAME/KEY: misc\_feature  
 7197 <222> LOCATION: 1, 10, 22, 27, 31  
 7198 <223> OTHER INFORMATION: r = a or g  
 7200 <400> SEQUENCE: 379

E--> 7201 rannccnnnr cngncccg nrcngurnnn r 31 ✓  
 7392 <210> SEQ ID NO: 388  
 7393 <211> LENGTH: 19 *Found 18*  
 7394 <212> TYPE: RNA  
 7395 <213> ORGANISM: Artificial Sequence  
 7397 <220> FEATURE:  
 7398 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =  
 7399 synthetic construct  
 7401 <220> FEATURE:

## RAW SEQUENCE LISTING

DATE: 07/28/2004

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TIME: 15:47:41

Input Set : A:\228234\_5.doc

Output Set: N:\CRF4\07282004\J669162B.raw

7402 <221> NAME/KEY: misc\_feature  
 7403 <222> LOCATION: 1-3, 10-11, 14-17, 19  
 7404 <223> OTHER INFORMATION: n = g, a, c or u  
 7406 <220> FEATURE:  
 7407 <221> NAME/KEY: misc\_feature  
 7408 <222> LOCATION: 18  
 7409 <223> OTHER INFORMATION: r = a or g  
 7411 <220> FEATURE:  
 7412 <221> NAME/KEY: misc\_feature  
 7413 <222> LOCATION: 8  
 7414 <223> OTHER INFORMATION: y = c or u  
 7416 <400> SEQUENCE: 388  
 --> 7417 nngügcyan necnnnnrn <sup>19</sup>18  
 7498 <210> SEQ ID NO: 393  
 7499 <211> LENGTH: 43 <sup>Found 44</sup>  
 7500 <212> TYPE: RNA  
 7501 <213> ORGANISM: Artificial Sequence  
 7503 <220> FEATURE:  
 7504 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =  
 7505 synthetic construct  
 7507 <220> FEATURE:  
 7508 <221> NAME/KEY: misc\_feature  
 7509 <222> LOCATION: 1-8, 14-20, 21-22, 32-43  
 7510 <223> OTHER INFORMATION: n = g, a, c or u  
 7512 <220> FEATURE:  
 7513 <221> NAME/KEY: misc\_feature  
 7514 <222> LOCATION: 9-10, 29  
 7515 <223> OTHER INFORMATION: r = a or g  
 7517 <220> FEATURE:  
 7518 <221> NAME/KEY: misc\_feature  
 7519 <222> LOCATION: 23, 31  
 7520 <223> OTHER INFORMATION: y = c or u  
 7522 <400> SEQUENCE: 393  
 --> 7523 nnnnnnnnnrr, agnnnnnnnn nnygccgarg ynnnnnnnnnn nnn <sup>43</sup>44  
 7567 <210> SEQ ID NO: 396  
 7568 <211> LENGTH: 27 <sup>Found 17</sup>  
 7569 <212> TYPE: RNA  
 7570 <213> ORGANISM: Artificial Sequence  
 7572 <220> FEATURE:  
 7573 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =  
 7574 synthetic construct  
 7576 <220> FEATURE:  
 7577 <221> NAME/KEY: misc\_feature  
 7578 <222> LOCATION: 1-11  
 7579 <223> OTHER INFORMATION: n = g, a, c or u  
 7581 <220> FEATURE:  
 7582 <221> NAME/KEY: misc\_feature  
 7583 <222> LOCATION: 12  
 7584 <223> OTHER INFORMATION: y = c or u

RAW SEQUENCE LISTING

DATE: 07/28/2004

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TIME: 15:47:41

Input Set : A:\228234\_5.doc

Output Set: N:\CRF4\07282004\J669162B.raw

7586 <400> SEQUENCE: 396

E--> 7587 nnnnnnnnnn nyuguca

27-17

## VERIFICATION SUMMARY

DATE: 07/28/2004

PATENT APPLICATION: US/10/669,162B

TIME: 15:47:42

Input Set : A:\228234\_5.doc

Output Set: N:\CRF4\07282004\J669162B.raw

L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:120  
M:341 Repeated in SeqNo=3  
L:109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
M:341 Repeated in SeqNo=5  
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:179 M:254 (E) No. of Bases conflict, LENGTH:Input:0 Counted:36 SEQ:8 ✓  
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:207 M:254 (E) No. of Bases conflict, LENGTH:Input:0 Counted:51 SEQ:9 ✓  
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
M:341 Repeated in SeqNo=10  
L:264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
M:341 Repeated in SeqNo=11  
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
M:341 Repeated in SeqNo=15  
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
M:341 Repeated in SeqNo=16  
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
M:341 Repeated in SeqNo=17  
L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:381 M:254 (E) No. of Bases conflict, LENGTH:Input:0 Counted:22 SEQ:18 ✓  
L:394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
M:341 Repeated in SeqNo=21  
L:437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
M:341 Repeated in SeqNo=22  
L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0  
M:341 Repeated in SeqNo=23  
L:470 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
M:341 Repeated in SeqNo=24  
L:485 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0  
M:341 Repeated in SeqNo=25  
L:500 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
M:341 Repeated in SeqNo=26  
L:517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
M:341 Repeated in SeqNo=27  
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
M:341 Repeated in SeqNo=28  
L:547 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
M:341 Repeated in SeqNo=29  
L:563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
M:341 Repeated in SeqNo=30  
L:579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
M:341 Repeated in SeqNo=31  
L:595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0

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Input Set : A:\228234\_5.doc

Output Set: N:\CRF4\07282004\J669162B.raw

M:341 Repeated in SeqNo=32  
L:611 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
M:341 Repeated in SeqNo=33  
L:628 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0  
M:341 Repeated in SeqNo=34  
L:1069 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:23 SEQ:60 ✓  
L:1655 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:98'  
L:1656 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:51 SEQ:98  
L:7201 M:252 E: No. of Seq. differs, <211> LENGTH:Input:30 Found:31 SEQ:379 ✓  
L:7417 M:254 E: No. of Bases conflict, LENGTH:Input:19 Counted:18 SEQ:388 ✓  
L:7417 M:252 E: No. of Seq. differs, <211> LENGTH:Input:19 Found:18 SEQ:388 ✓  
L:7523 M:254 E: No. of Bases conflict, LENGTH:Input:43 Counted:44 SEQ:393 ✓  
L:7523 M:252 E: No. of Seq. differs, <211> LENGTH:Input:43 Found:44 SEQ:393 ✓  
L:7587 M:254 E: No. of Bases conflict, LENGTH:Input:27 Counted:17 SEQ:396 ✓  
L:7587 M:252 E: No. of Seq. differs, <211> LENGTH:Input:27 Found:17 SEQ:396 ✓  
L:22 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (377) Counted (410)

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.